

# UTAH DEPARTMENT OF TRANSPORTATION

## TRAFFIC OPERATIONS CENTER

### MONTHLY REPORT **FEBRUARY 2003**

2060 South 2760 West, Salt Lake City, UT 84104  
 Phone: 887-3700 Fax: 887-3797 [www.commuterlink.utah.gov](http://www.commuterlink.utah.gov)



#### Field Devices Summary

Freeway Closed Circuit Television (CCTV)	163
Surface Street CCTV	32
Dial-up CCTV	35
<b>Total CCTV</b>	<b>230</b>
Freeway VMS	42
Surface Street VMS	17
Portable VMS	2
<b>Total VMS</b>	<b>61</b>
HAR (5 deployed, 5 portable units)	10
TMS	231
RWIS	48
Connected Traffic Signals	608
Connected Ramp Meters	23

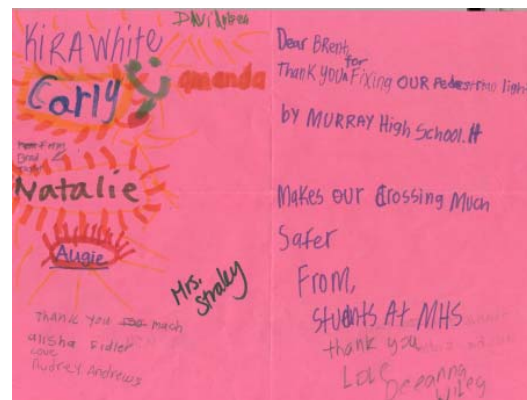


The Traffic Operations Center was host to a delegation from El Paso, Texas.

#### Operations Summary

VMS Messages Displayed	159
Signal Timing Calls	30
Signal Maintenance Calls	275
New Work Orders	391
Incident Responses	434
Website Visitor Sessions	80,291
511 Calls	37,272
Email Alerts Sent	451
CommuterLink Questions	6

#### KUDOS!



“Thank you for fixing our pedestrian light ... It makes our crossing much safer.”

#### TOC Employee of the Month



**Michael Van Orman**  
 IT Analyst III  
 ISS

#### TOC Mission

1. To Support UDOT and the Department of Public Safety in Improving Highway Safety.
2. To Help Provide Reliable and Efficient Travel.
3. To Provide Useful and Timely Real-time Traffic Information.
4. To Work Together with Other Government Agencies to Serve the Public.
5. To Provide Excellent Customer Service.

# ACTIVITY HIGHLIGHTS

## TOC Activities

### *This Month*

1. Attorney General Mark Shurtleff held a press conference after the Rachel Alert aided in the safe recovery of 22-month-old Nicholas Triplett. Less than five hours after the Rachel Alert was initiated, the police recovered baby Nicholas and arrested three suspects. “The Rachel Alert works because police officers, broadcasters and everyone in Utah joins together to make it work,” said Attorney General Mark Shurtleff. Refining the Rachel Alert process remains a work in progress and is constantly being reviewed for possible improvements. To this end, future alert information will also be available on the CommuterLink website.
2. TOC Tours: A group from TxDOT’s El Paso District toured the TOC on February 7. A high-ranking transportation official from the country of Ghana toured the TOC on February 11. A group from the Japanese Ministry of Land Infrastructure and Transport visited the TOC on February 14. They were in Utah to study UDOT’s successful use of the design/build process.
3. TOC Staff received a Customer Service Training during February. Troy Hyer, TOC Control Room Supervisor, conducted the training, which was attended by the TOC Administrative and Control Room Staff members. The course covered seven key areas of customer service including first impressions and developing lifetime customers. Troy emphasized the TOC is centered on delivering exceptional customer service, and continuing to provide the public with this will keep the TOC staff employed.
4. Mark Taylor, of the Traffic Signal Systems Section, was awarded the Exemplary Employee of the Year Award for the Traffic Operations Center Division. Mark is currently an Engineer III with UDOT. He has been with UDOT for four years. Mark received this award for his commitment to customer service and exemplary work ethic.



Adrian Ruiz of DPS and Dennis Simmons of the TOC Control Room represented the TOC at a press conference regarding the Rachel Alert held in the Attorney General’s office.



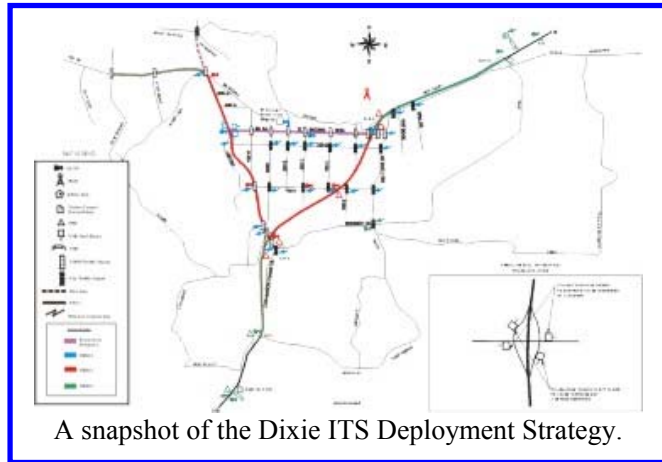
Troy Hyer, TOC Control Room Supervisor, presenting the “How to Deliver Exceptional Customer Service” training.



David Miles presents Mark Taylor with the Exemplary UDOT Employee Award.

## ATMS Improvement and Expansion Activities

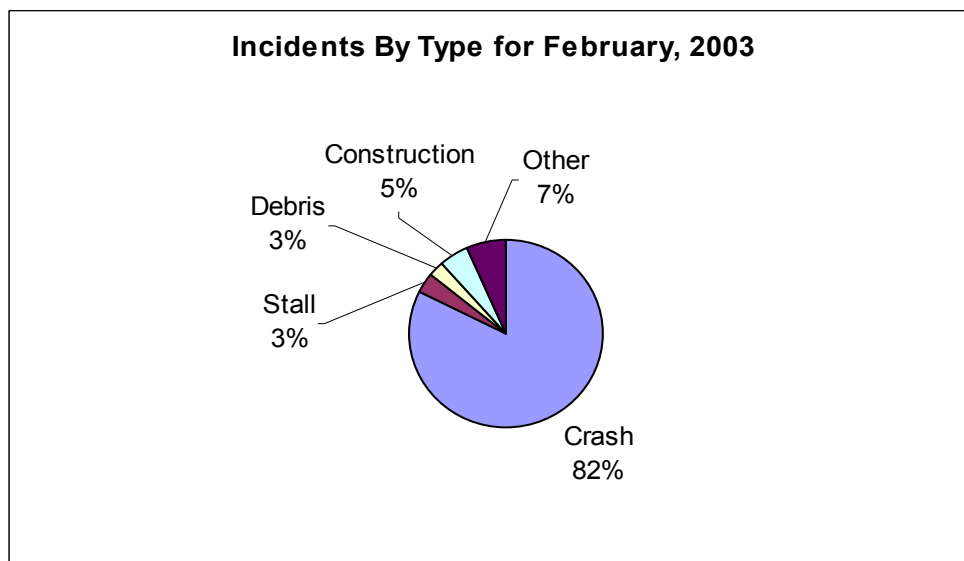
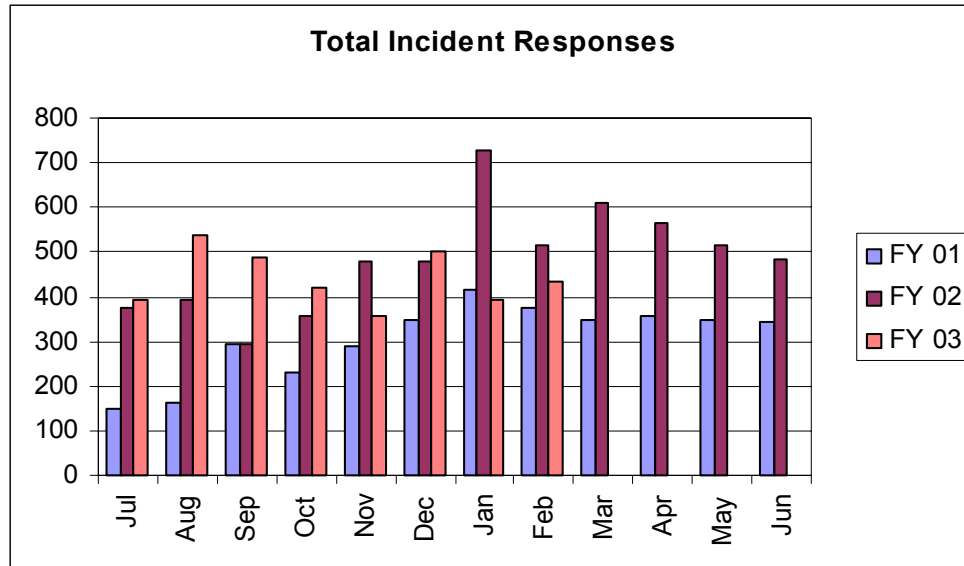
1. FHWA has identified UDOT to become the national test site for the NTCIP ramp meter. The results of this evaluation study will be used to improve upon the standard and its implementation. Exhaustive tests of the NTCIP ramp meter software were performed in February, which identified a few items that still need to be addressed before the software can be deployed. The first meeting of the NTCIP ramp meter user group was held in February. This group provided input for the final user interface (GUI) design.
2. The ITS group is preparing a Dixie ITS Deployment Strategy for St. George and the surrounding area. The proposed plan includes the installation of Fiber Optic Cable, the integration of traffic signals, the installation of advanced traffic signal control, RWIS, TMS, HAR, VMS, Trailblazers, wireless communications, and CCTV.
3. The ATMS Statewide Deployment Plan was distributed for comment.
4. Four Utah County ATMS expansion projects were defined. The Spanish Fork Signal Interconnect Phase 2 project will provide a Utah County fiber backbone from the Region 3 headquarters to Spanish Fork via the cities of Orem and Provo. The SR-6 CCTV project will integrate some of the existing ATMS devices on SR-6 with the Utah County backbone. Another project will integrate some existing CCTV and signals with CommuterLink, and the fourth project will integrate the Region 3 headquarters with the TOC. Region 3 is also working to incorporate several new ATMS devices into an upcoming resurfacing project from the Point of the Mountain to just beyond the Alpine (SR-92) interchange. ATMS elements include fiber optic cable, RWIS, CCTV, VMS, and TMS.
5. A project in Region 1 is being planned which will include the installation of fiber along I-15 between Farmington and Hill Field Road. This connection will complete the fiber path between the TOC and Region 1 headquarters.
6. The ITS division has recently completed a review/assessment/repair of all TMS sites to recalibrate and document the quality of data being collected. Speed data has improved immensely as a result of this work. The remaining work consists primarily of hardware issues (e.g. replacement of faulty 2070 controllers).



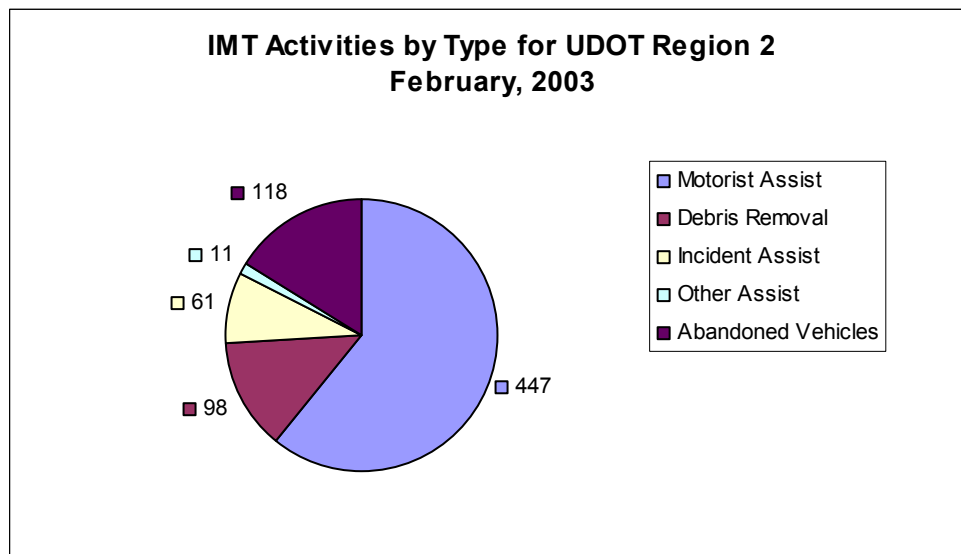
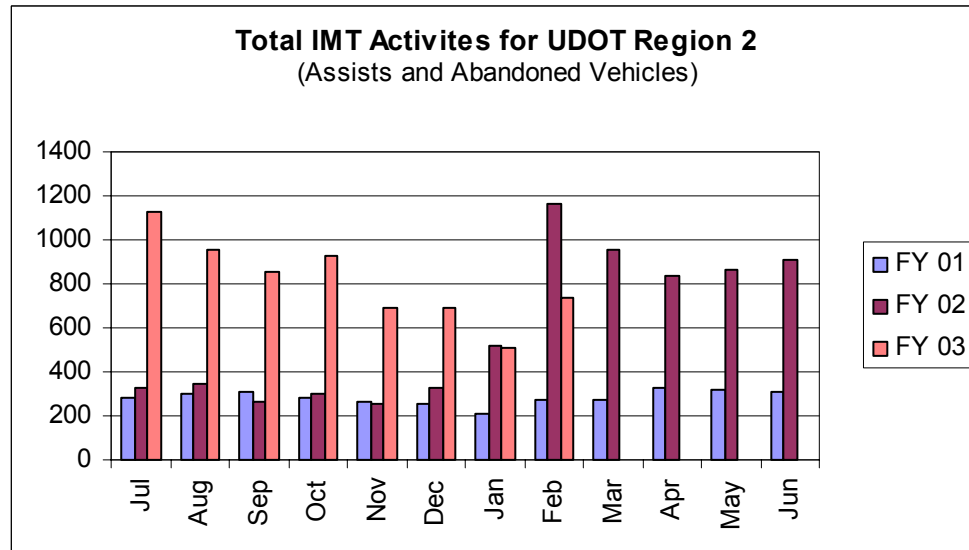
<u>Acronyms</u>	
<b>ATMS</b>	Advanced Traffic Management System
<b>CCTV</b>	Closed Circuit Television
<b>DPS</b>	Department of Public Safety
<b>HAR</b>	Highway Advisory Radio
<b>RWIS</b>	Road-Weather Information System
<b>NTCIP</b>	National Transportation Communications for ITS Protocol
<b>TMS</b>	Traffic Monitoring Station (count station)
<b>TOC</b>	Traffic Operations Center
<b>TTI</b>	Travel Time Index
<b>VMS</b>	Variable Message Sign

## Safety

An incident response is an incident recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Each time an incident is created information is disseminated via the 511 system, the website, and email alerts.



## Region 2 Incident Management Team (IMT) Activities



## Freeway Flow

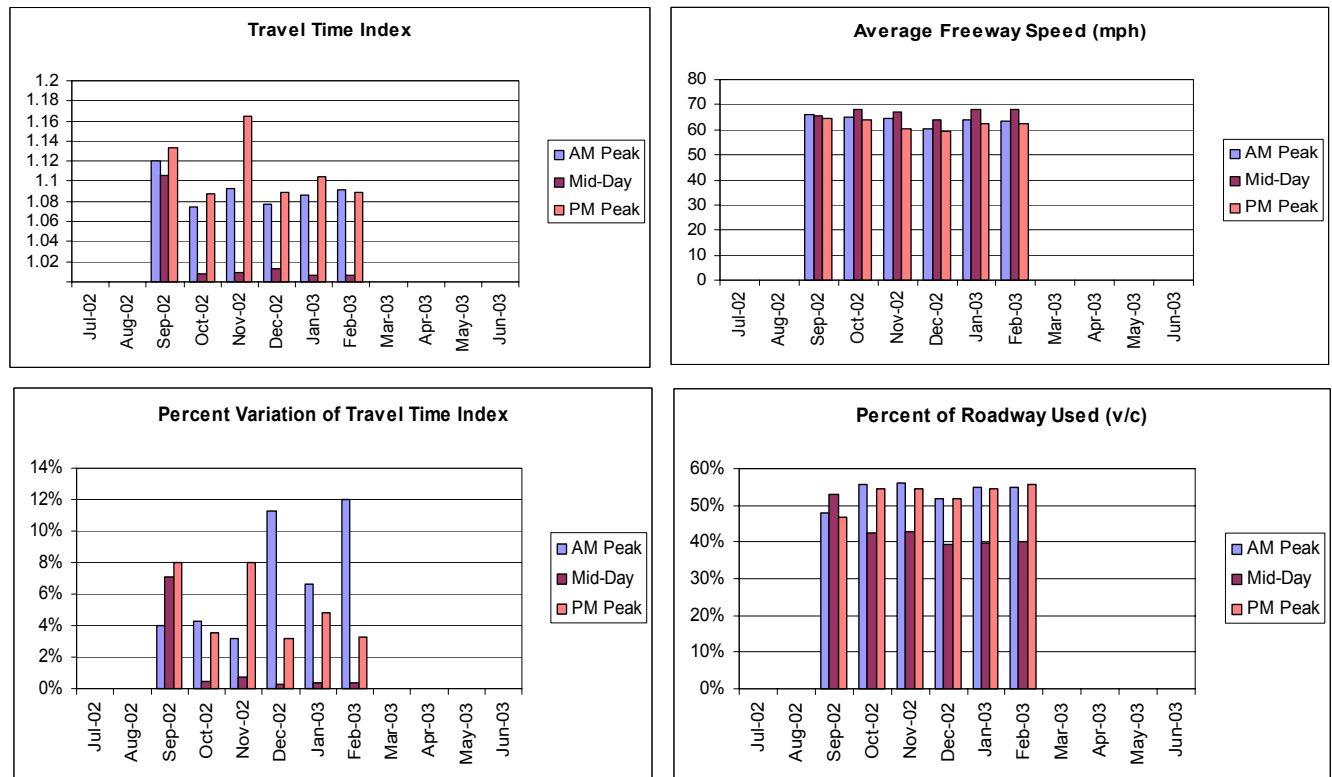
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

*Travel Time Index:* This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of one (1) represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

*Percent Variation of Travel Time Index:* The percent variation in the Travel Time Index is a measure of how much the Travel Time index changes from day-to-day.

*Average Freeway Speed:* The Freeway Speed is weighted by volume.

*Percent of Roadway Used:* The percent of roadway used is the ratio of the volume on the segment to its capacity. This is otherwise known as the volume to capacity ratio, or (v/c).



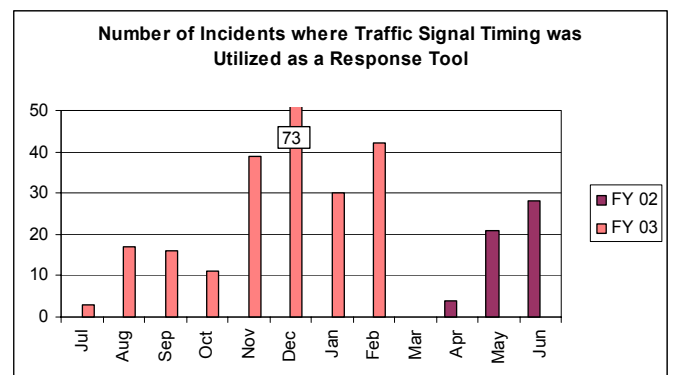
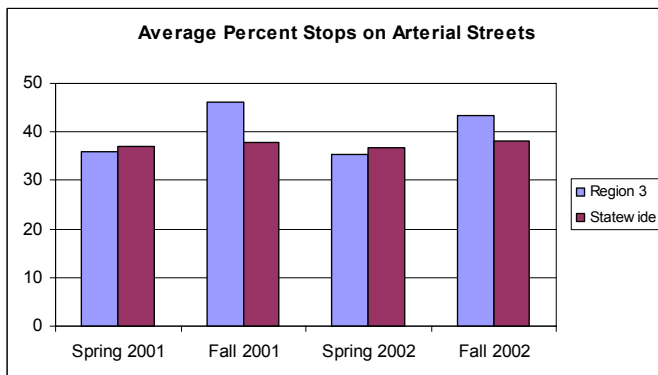
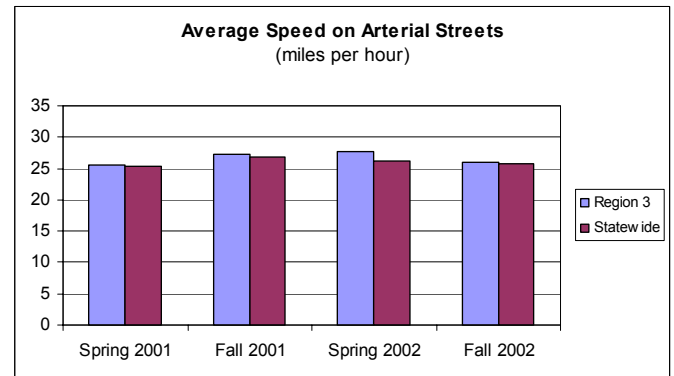
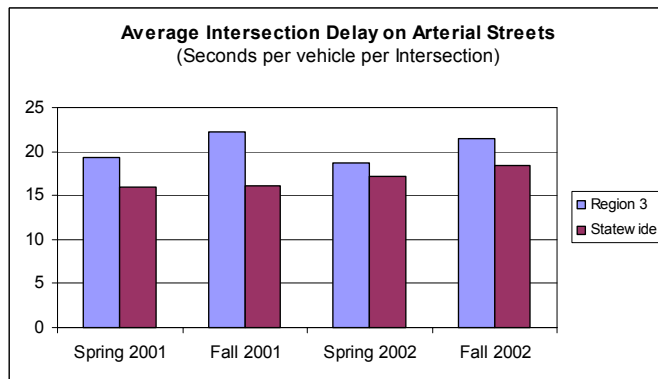
The 6 links with the highest average Travel Time Index for the month are:

Segment	Period	AvgOfTTI
I-15 NB from 600 S to 600 N	PM Peak	1.39
I-215 S WB from Knudsen's Corner to I-15	AM Peak	1.39
I-215 S WB from Knudsen's Corner to I-15	PM Peak	1.27
I-15 NB from 600 N to I-215 W	PM Peak	1.26
SR-201 WB from I-15 to I-215 W	PM Peak	1.17
SR-201 WB from I-215 W to 7000 W	AM Peak	1.17

## Surface Street Flow

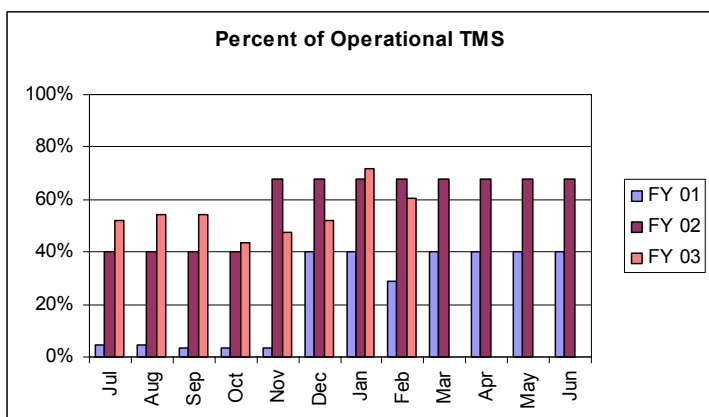
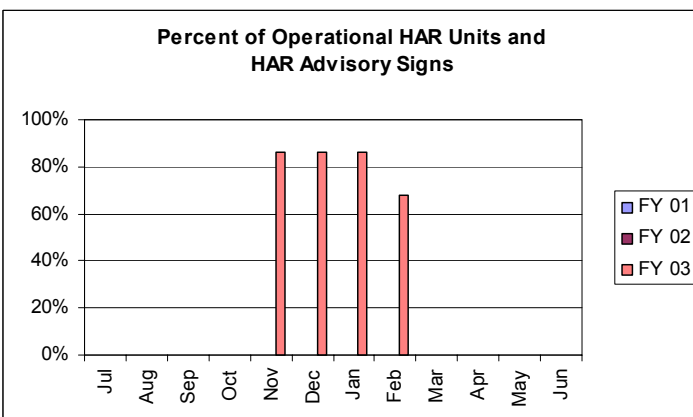
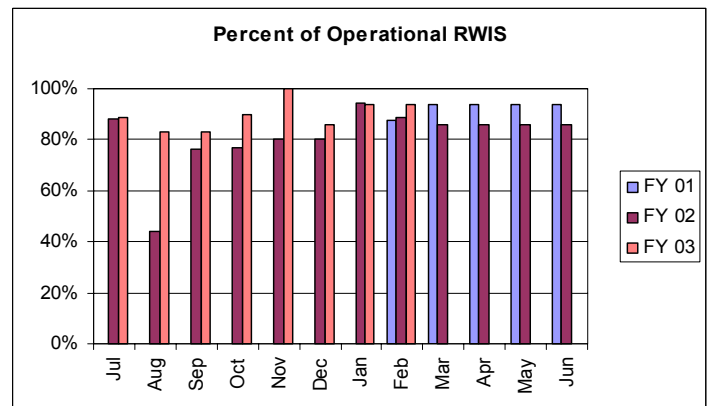
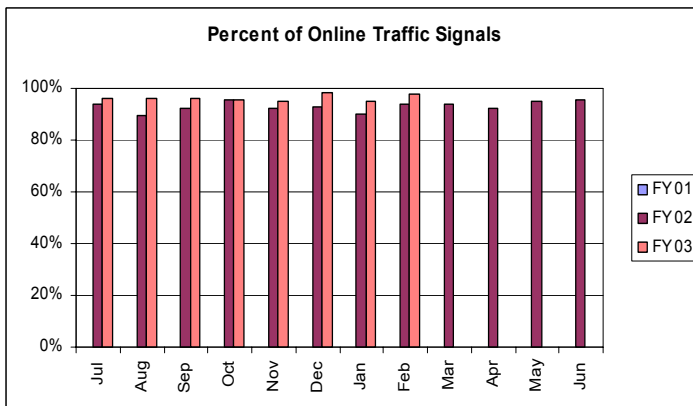
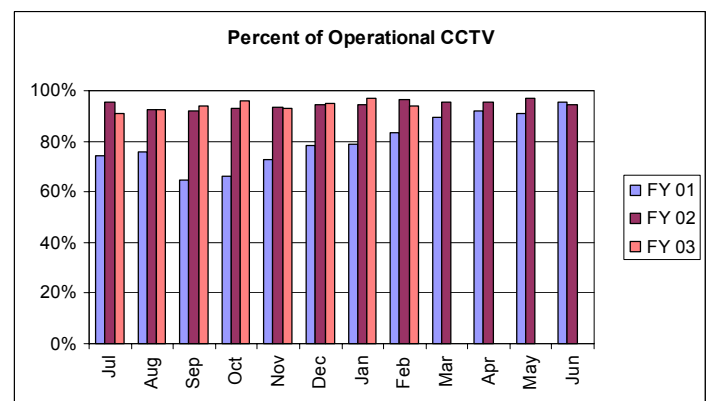
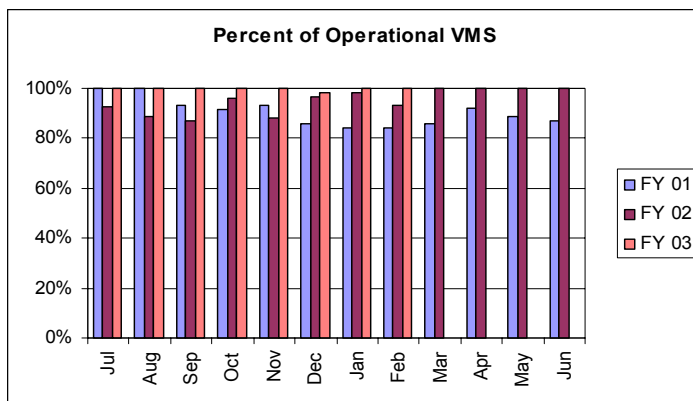
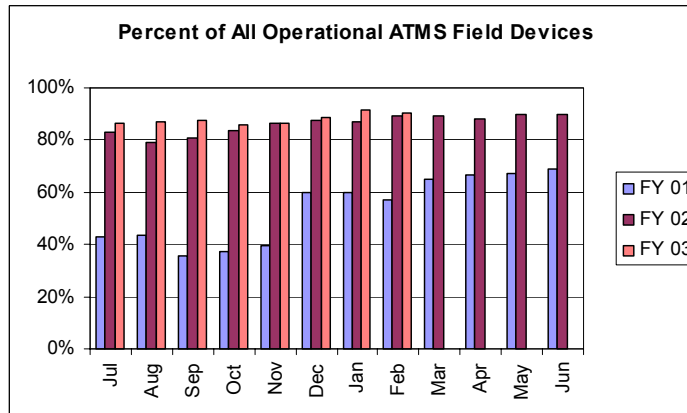
The surface street statistics are generated through a series of Travel Time measurements. Much can be learned through several runs along a corridor, including the average travel time, the average percent of intersections at which a vehicle must stop, the average time stopped at an intersection, and the average speed. The Statewide Timing group gathers these measurements from Regions 1-4 once in the spring and again in the fall of each year. The chart in the lower right corner shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help flush out excessive congestion.

Since the data is gathered semi-annually, this monthly report will provide charts for one region each month compared to the statewide average. The charts below represent Region 3 compared to the Statewide Average.



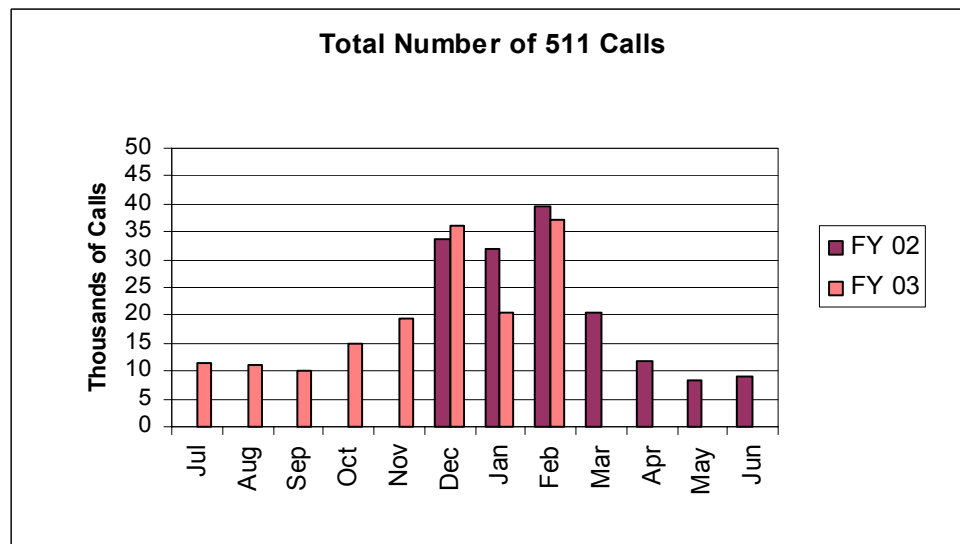
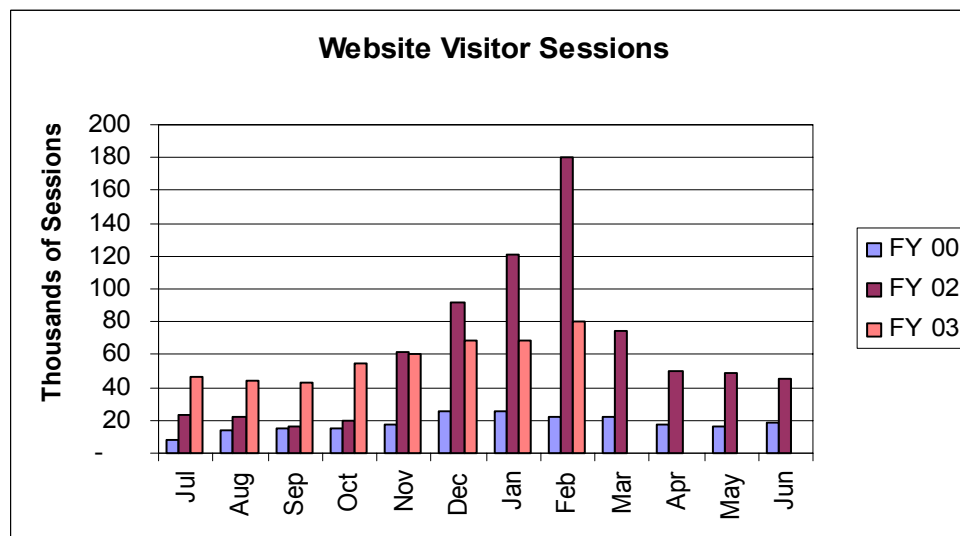
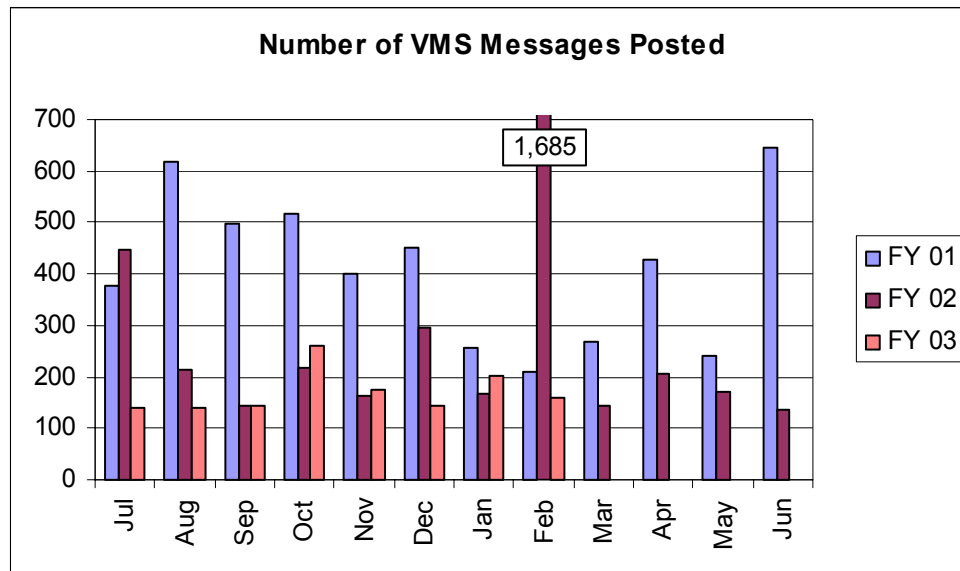


# Maintenance





## Traveler Information



# Customer Service

